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GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER OREILLY, PATRICK F	
			ART UNIT 3749	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/573,586

Applicant(s)

OKA ET AL.

Examiner

Patrick F. O'Reilly III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/27/2006; 4/13/2007; and 7/27/2007.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). Certified copies of the priority documents have been received.

### ***Information Disclosure Statement***

2. The information disclosure statements (IDSs) submitted on March 27, 2006, April 13, 2007, and July 27, 2007 are acknowledged. The submissions are in compliance with the provisions of 37 C.F.R. § 1.97 and 37 CFR § 1.98 and, therefore, the references therein have been considered.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

On page 19 of the specification, in lines 12-13, Fig. 11(a) is said to depict "...the horizontal flap 144 swinging between the horizontal direction and a direction a few degrees downward during cooling operation...". However, Fig. 11(a) does not depict air being discharged in the horizontal direction. The description should be reconciled with the graphical depiction in Fig. 11(a).

Appropriate correction is required.

### ***Claim Objections***

4. Claim 19 is objected to because of the following informality: the recited dependence on claim 2 appears to be improper. Rather, it seems that the applicant intended this claim to depend

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upon claim 3. Thus, for the purpose of an examination on the merits, claim 19 has been treated as to depend on claim 3, rather than claim 2. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-4, 6-14, 16-17, and 19** are rejected under 35 U.S.C. 102(b) as being anticipated by UK Patent Application No. GB 2 260 830 A (“GB ‘830”). The specification and the drawings in the GB ‘830 reference disclose all of the elements recited in **claims 1-4, 6-14, 16-17, and 19** of this application.

7. Specifically, in regard to claim 1, which is directed to an air conditioner, the GB ‘830 reference discloses all of the claimed elements, including: an air conditioning mechanism (air conditioner 100 having a heat exchanger, indoor fan, fan motor 11, etc.) configured and arranged to perform air conditioning of indoor air; an air deflector (outlet 250 that is equipped with an air direction-adjustment device which can adjust the horizontal and vertical direction of the discharged air 25A) configured and arranged relative to the air conditioning mechanism (100) to selectively adjust an air flow direction in which conditioned air (discharged air 25A) is discharged from the air conditioning mechanism (100); and a control unit (controller 20) operatively coupled to the air conditioning mechanism (100) to selectively perform powerful operation whereby a capacity of said air conditioning mechanism (100) is temporarily increased (the controller 20 can be programmed such that the fan motor 11 is increased to provide a larger

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volume of air for a limited time duration while a human sensor 30 detects the presence of a person), said control unit (controller 20) being further operatively coupled to the air deflector (outlet 250) to selectively adjust the air flow direction of said air deflector (250) in accordance with a signal representing a detected direction in which people are present during said powerful operation (the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the discharged air 25A either towards or away from detected human bodies). Refer to GB '830, Figures 13-16; page 13 of the specification, lines 17-25; page 14, lines 1-25; page 15, lines 1-24; and page 17, lines 15-25. Therefore, because all of the elements in claim 1 of this application are disclosed by the GB '830 reference, this claim is rejected in accordance with 35 U.S.C. 102(b).

8. In regard to claim 2, the GB '830 reference further discloses that the control unit (controller 20) is configured and arranged to selectively adjust the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) so that air is discharged in the detected direction (W1, W2) in which people are present during said powerful operation (in the first mode, the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the discharged air in directions W1, W2 towards detected human bodies). See GB '830, Figures 14-15 and page 16 of the specification, lines 12-22. Thus, the GB '830 reference meets the language of this claim.

9. In regard to claim 3, the GB '830 reference further discloses that the control unit (controller 20) is configured and arranged to selectively adjust the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) so

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that air is discharged in a direction (W12, W12', W14) in which people are not present during said powerful operation (in the second mode, the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the discharged air in directions W12, W12', and W14 around, and away from, detected human bodies). Refer to GB '830, Figures 14 and 16; page 16 of the specification, lines 23-25; and page 17, lines 1-14. Consequently, the GB '830 reference also meets the language set forth in claim 3.

10. In regard to claims 4, 14, and 17, the GB '830 reference further discloses that the control unit (controller 20) is configured and arranged to selectively maintain the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) at a fixed orientation during said powerful operation (in the first mode, where air is directed towards the person, the discharged air is directed in fixed directions W1, W2 – Fig. 14, whereas, in the second mode, where air is directed away from the person, the discharged air is directed in fixed directions W12, W12', and W14 – Fig. 16). See GB '830, Figures 14-16; page 16 of the specification, lines 12-25; and page 17, lines 1-14. Therefore, the GB '830 reference also meets the language set forth in these claims.

11. In regard to claims 6 and 7, the GB '830 reference further discloses that (claim 6) the control unit (controller 20) further includes a timer configured and arranged to selectively limit a time in which said control unit (20) performs said powerful operation (the controller 20 has timing capabilities such that the fan motor 11 can be increased to provide a larger volume of air for a limited time duration while a human sensor 30 detects the presence of a person), and wherein (claim 7) the control unit (controller 20) is further operatively coupled to the timer such

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that a time at which said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) is stopped during said powerful operation is set in said timer (the controller 20 has timing capabilities such that the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 is modulated for a limited time duration so as to direct the discharged air 25A either towards or away from detected human bodies). Refer to GB '830, Figures 14-16; page 15 of the specification, lines 17-23; page 16 of the specification, lines 12-25; and page 17, lines 1-14. Thus, the GB '830 reference meets the language set forth in claims 6 and 7.

12. In regard to claims 8, 16, and 19, the GB '830 reference further discloses that the air deflector (outlet 250) comprises a vertically movable flap (the air direction-adjustment device of outlet 250 includes a set of vertical-movable grilles 26 which can control the vertical direction of the discharged air). See GB '830, Figure 14; page 14 of the specification, lines 19-24. Consequently, the GB '830 reference also meets the language set forth in these claims.

13. In regard to claim 9, the GB '830 reference further discloses that the air conditioning mechanism (air conditioner 100) further includes a sensor (human sensor 30) configured and arranged to detect said people during said powerful operation and output the signal representing the detected direction of said people to said control unit (the human sensor 30 detects the presence of human bodies and transmits that signal to the controller 20 in order to control the direction, intensity, and duration of the discharged air accordingly). Refer to GB '830, Figures 13-14; page 14 of the specification, lines 3-5 and 24-25; page 15, lines 1-5 and 13-24; and page 17, lines 15-25. Therefore, the GB '830 reference also meets the language set forth in claim 9.



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14. In regard to claim 10, the GB '830 reference further discloses that the control unit (controller 20) is further configured and arranged to selectively adjust the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) when said powerful operation is set during cooling operation (the controller 20 and adjustable air outlet 250 are provided as components of an air conditioner 100 and therefore, can be used to selectively adjust the air flow direction during a cooling operation). See GB '830, Figure 13-14; page 13 of the specification, lines 17-25; and page 14, lines 1-16. Thus, the GB '830 reference meets the language of this claim.

15. In regard to claim 11, which is directed to a method for controlling an air conditioner, the GB '830 reference discloses all of the claimed elements, including: operating an air conditioning mechanism (air conditioner 100 having a heat exchanger, indoor fan, fan motor 11, etc.) for performing air conditioning of indoor air; controlling (by virtue of controller 20) said air conditioning mechanism (100) for selectively performing powerful operation such that a capacity of said air conditioning mechanism is temporarily increased (the controller 20 can be programmed such that the fan motor 11 is increased to provide a larger volume of air for a limited time duration while a human sensor 30 detects the presence of a person); and adjusting an air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) for selectively controlling an air flow direction of conditioned air (discharged air 25A) discharged from said air conditioning mechanism (100) such that the air flow direction of said air deflector is adjusted in accordance with a detected direction in which people are present during said powerful operation (the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the

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discharged air 25A either towards or away from detected human bodies). Refer to GB '830, Figures 13-16; page 13 of the specification, lines 17-25; page 14, lines 1-25; page 15, lines 1-24; and page 17, lines 15-25. Therefore, because all of the elements in claim 11 of this application are disclosed by the GB '830 reference, this claim is rejected in accordance with 35 U.S.C. 102(b).

16. In regard to claim 12, the GB '830 reference further discloses that the adjusting of the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) is adjusted so that air is discharged in the detected direction (W1, W2) in which people are present during said powerful operation (in the first mode, the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the discharged air in directions W1, W2 towards detected human bodies). See GB '830, Figures 14-15 and page 16 of the specification, lines 12-22. Thus, the GB '830 reference meets the language of this claim.

17. In regard to claim 13, the GB '830 reference further discloses that the adjusting of the air flow direction of said air deflector (outlet 250 having horizontal and vertical air direction-adjustment devices 25, 26) is adjusted so that air is discharged in a direction (W12, W12', W14) in which people are not present during said powerful operation (in the second mode, the controller 20 modulates the operation and actuation of the horizontal and vertical air direction-adjustment devices 25, 26 of the outlet 250 so as to direct the discharged air in directions W12, W12', and W14 around, and away from, detected human bodies). Refer to GB '830, Figures 14 and 16; page 16 of the specification, lines 23-25; and page 17, lines 1-14. Consequently, the GB '830 reference also meets the language set forth in claim 13.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. **Claims 5, 15, and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over UK Patent Application No. GB 2 260 830 A ("GB '830") in view of the alternative embodiment depicted in Figure 9 of the GB '830 reference. The two embodiments in the GB '830 reference, when considered together, teach all of the elements recited in **claims 5, 15, and 18** of this application.

20. In particular, claims 5, 15, and 18 of this application are obvious when the embodiment depicted in Figures 13-16 of the GB '830 reference is viewed in light of the embodiment depicted in Figure 9 of this same reference. As described above, the embodiment depicted in Figures 13-16 of the GB '830 reference discloses all the elements of the base claims upon which these three claims depend. However, claims 5, 15, and 18 of this application further disclose that the said control unit is further configured and arranged to selectively change a swing range of said air deflector to a different swing range during said powerful operation. The embodiment depicted in Figures 13-16 of the GB '830 reference does not contain this additional limitation. Although, the embodiment depicted in Figure 9 of the GB '830 reference teaches a control sequence of operation for an air deflector having horizontal and vertical movable grilles (25, 26) wherein, upon the detection of human presence in two or more different locations by a human sensor (3), a control device (2) commands the oscillation of the movable grilles (25, 26) so as to

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direct airflow (Wr) into an area (a) with varying direction for the purpose of satisfying the comfort needs of multiple occupants located in discrete locations within a conditioned space.

Refer to GB '830, Figure 9; page 11 of the specification, lines 14-25; and page 12, lines 1-6.

Therefore, when the embodiment depicted in Figures 13-16 of the GB '830 reference is viewed in light of the embodiment depicted in Figure 9 of this same reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the air conditioning unit having an automatically adjustable air deflector controlled by a human sensor, by controlling the air deflector to oscillate in a different swing range upon the detection of a human body during powerful operation, as taught by the embodiment depicted in Figure 9 of the GB '830 reference, rather than to assume a fixed orientation as disclosed in the embodiment of Figures 13-16, in order to satisfy the comfort needs of multiple occupants located in discrete locations within a conditioned space.

### *Conclusion*

21. See attached form PTO-892 for additional pertinent prior art, which was not directly relied upon in this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick F. O'Reilly III whose telephone number is (571) 272-3424. The examiner can normally be reached on Monday through Friday, 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**PF03**  
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**KENNETH RINEHART**  
**PRIMARY EXAMINER**